

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated May 20, 2005 has been received and its contents carefully reviewed.

Claims 1-8, 10, 11, 13-32 and 34-62 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In making that rejection the Examiner stated:

Claim 1 recites, "A resin cushion article having a spring structure." Is the article in the structure of a spring? According to the specification, the article contains filaments that have a spring structure. But the article itself does not have the recited "spring structure."

Claim 2 recites the structure has "voids providing each portions of low and high bulk densities." How can a void provide both high density and low density? Voids would typically be thought of areas of low density, so how do they provide high density?

Claim 1 has now been amended to call for a resin-molded article having a cushion structure. Accordingly it is Applicant's contention that this amendment should overcome the rejection of Claim 1 under 35 U.S.C. 112, second paragraph. Further, it is Applicant's contention that there are many descriptions of "a resin cushion element" as for example on page 3 lines 27. Therefore it is Applicant's contention that this amendment is supported by the description of the Specification and no new matter has been entered. Further, Claim 2 has been amended to provide wherein said three-dimensional structure has high-density portions and low-density portions. It is respectfully contended that this language clearly overcomes the rejection under 35 U.S.C.

112. Accordingly, it is Applicant's contention that Claims 1-8, 10, 11, 13-32 and 34-62 are now in proper form for allowance.

Claim 1-6 13, 32, 34-48 and 52-62 were rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. (U.S. Patent No. 5,972,463) in view of Kargol et al. (U.S. Patent No. 5,492,662). It is respectfully contended that Martin et. al (Column 13, Lines 55 to 63) discloses that the bulk density (or void volume), width, thickness, and loftiness of the webs made from filaments of this invention can be varied by selecting the desired polymers and combinations thereof. In Martin et al., embossing is only a method for changing the bulk density (or void volume). As shown from Fig. 24 of Martin et al., height of the resulting article is uneven between the high-density portions and low-density portions. As shown from Fig. 1, in the present invention, the thickness of the high-density portions and low-density portions are the same. Therefore, the structure of the present invention is patentably distinguished from that of Martin et al.

Concerning rejection with respect to Claim 62, please note that amended Claim 62 calls for the resin molded article according to Claim 1 wherein high-density portions having an increased bulk density which each extend in a direction of width of said three-dimensional structure arranged at appropriate space intervals in a direction of length of the three dimensional structure are formed by changing a take off speed for taking off the extruded continuous filaments. It is Applicant's contention that this concept is not disclosed or suggested by the prior art. Accordingly, amended Claim 62 should be allowed.

Concerning Rejection 7:

In Karami, the high density portions are formed by compressing strips raised with being spaced each other on a pad made of wood fluff, i.e., fibers (Column 3, Lines 30 to 43). In Karami, to fuse and bond the fibers each other is neither described nor suggested. Therefore, an article made of thermobondable fibers disclosed in Hansen by using a method of Karami is different from the article of the present invention.

Concerning Rejection 8:

As mentioned in our comment concerning to Rejection 6, in Martin et al., embossing is only method for changing the bulk density (or void volume). As shown from Fig. 24 of Martin et al., height of the resulting article is uneven between the high density portions and low density portions. Therefore, an article made of styrene-butadiene-styrene polymer disclosed in Insley et al. by using a method disclosed in Martin et al. is different from the article of the present invention.

Concerning Rejection 10:

This rejection should be withdrawn in revised Claim 2.

Concerning Rejection 11:

This rejection should be withdrawn in revised Claim 1.

Concerning Rejections 12, 13:

Filaments manufactured in Martin et al. is a helically or coil-shaped continuous filament as shown in Figs. 1A to 1D, Figs. 3 and 4.

The outstanding Office Action recites that "the rejection of the claims was based on using Kargol's method for providing low density portions and high density portions in the product of Martin."

In Kargol, a body of thermoplastic polymeric fibrous material is manufactured by providing a mold cavity with means for establishing and maintaining zones for different densities of polymeric fibers during a compression and bonding process, placing selected amounts of thermoplastic polymeric fiber in the zones so that the fibrous material in the zones are of different density, providing a polymeric coating having a low melting point on at least some of said polymeric fibers, compressing the mold cavity so that said fibrous polymeric body is held in the desired shape, passing a heated atmosphere through the mold cavity at a temperature sufficiently high to melt said

polymeric coating and cause the coating to flow in quantities sufficient to maintain said fibrous body in the desired shape when cooled; and cooling said fibrous body.

If the method disclosed in Kargol is applied to the continuous filaments disclosed in Marten, the continuous filaments of Marten is further coated by the polymeric coating of Kargol. Therefore, the resulting article is different from the article according to the present invention.

Concerning Rejection 14:

Page 9, Lines 7 to 8 of the present invention recites that "The contacted and entwined portions of the filaments are at least partially fused and bonded to one another.". To provide polymeric coating on the filaments of the present invention is neither disclosed nor suggested.

Concerning Rejection 15:

Material of an article according to Karami is wood fluff (Column 3, Line 31), thus the material of the Karami is different from that of the present invention. Therefore, the article of Karami is different from that of the article of the present invention in its structure.

Concerning Claim 16:

Please refer to our comment concerning Rejection 7.

Concerning Claim 17:

Please refer to our comment concerning Rejection 6.

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If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 04-0753. Please credit any overpayment to deposit Account No. 04-0753.

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Respectfully submitted,

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